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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,476	07/09/2003	Joseph Michael Lindacher	CL/V-32579A	9621

1095 7590 09/17/2004

NOVARTIS  
CORPORATE INTELLECTUAL PROPERTY  
ONE HEALTH PLAZA 430/2  
EAST HANOVER, NJ 07936-1080

EXAMINER
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STULTZ, JESSICA T

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/616,476

Applicant(s)

LINDACHER ET AL.

Examiner

Jessica T Stultz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0703</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION*****Specification***

The specification is objected to as failing to comply with 37 CFR 1.84(p)(5) because the following reference character(s) are not mentioned in the description: 210, 410a, 410b and 410c. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the specification will not be held in abeyance.

The abstract of the disclosure is objected to because it is too long. Specifically, the abstract cannot exceed more than 150 words; therefore it needs to be shortened. Correction is required. See MPEP 37 CFR 1.72.

***Claim Objections***

Claims 1, 10, 12, 19, 21, 29, 31, 38, 40, 46, and 47 are objected to because of the following informalities: in claims 1 and 46, the phrase "primary gaze and/or translating amount" should be changed to "primary gaze or translating amount, or both"; in claims 10, 12, 19, 21, 29, 31, 38, 40, and 47, the phrase "in first derivative and/or in second derivative" should be changed to "in first derivative or in second derivative, or both". Specifically, the phrase "and/or" is vague

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and the above corrections clarify the limitations of the claims. Additionally in claim 1, the phrase “to surrounding surface” should be “to a surrounding surface”, and in claim 46, “dowardly” should be “downwardly”. Appropriate correction is required.

### ***Double Patenting***

Claims 1-3, 6-7, 15-18, 24, 35-37, and 43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,773,107. Although the conflicting claims are not identical, they are not patentably distinct from each other because US 6,773,107 claims a contact lens having a central axis, anterior and posterior surfaces (Claim 1, lines 41-43, i.e. outer and inner surfaces, respectively), wherein the posterior surface has an optical zone and the anterior surface has an optical zone having a top edge and a lower edge (Claim 1, lines 44-52); and a ramped ridge zone capable of controlling contact lens position on an eye in primary gaze and/or translating amount across the eye when the eye changes from gazing at an object at a distance to gazing at an object at an intermediate distance or to gazing at a nearby object (Claim 1, lines 44-67, wherein the ramped ridge allow translation of the contact lens between the near and far distance portions), wherein the ramped ridge zone is disposed below the second optical zone and includes an upper edge, a lower ramped edge, a latitudinal ridge that extends outwardly from the anterior surface, and a ramp that extends downwardly from the lower ramped edge to surrounding surface and has a curvature or slope that provides a varying degrees of interaction between the ramped ridge zone and the lower eyelid depending on where in the lower eyelid of the eye strikes the ramped ridge zone, wherein the lower eyelid of the eye is engaged with at least some portion of the ramped ridge zone at all times (Claim 1, lines 62-67).

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Regarding claims 2-3, 7, 16-18, 35, and 37 of the present application, US 6,773,107 discloses the limitations therein (Claims 1 and 5).

Regarding claim 6 of the present application, US 6,773,107 discloses the limitations therein (Claim 4).

Regarding claims 15, 24, 43 of the present application; US 6,773,107 discloses the limitations therein (Claim 2).

Regarding claim 36 of the present application, US 6,773,107 discloses the limitations therein (Claim 1).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-7, 15-18, 24, 35-37, and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Ye et al US 6, 773,107 (herein referred to as Ye et al '107).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Ye et al '107 claims a contact lens having a central axis, anterior and posterior surfaces (Claim 1, lines 41-43, i.e. outer and inner surfaces, respectively), wherein the posterior surface has an optical zone and the anterior surface has an optical zone having a top edge and a lower edge (Claim 1, lines 44-52); and a ramped ridge zone capable of controlling contact lens position on an eye in primary gaze and/or translating amount across the eye when the eye changes from gazing at an object at a distance to gazing at an object at an intermediate distance or to gazing at a nearby object (Claim 1, lines 44-67, wherein the ramped ridge allow translation of the contact lens between the near and far distance portions), wherein the ramped

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ridge zone is disposed below the second optical zone and includes an upper edge, a lower ramped edge, a latitudinal ride that extends outwardly form the anterior surface, and a ramp that extends downwardly from the lower ramped edge to surrounding surface and has a curvature or slope that provides a varying degrees of interaction between the ramped ridge zone and the lower eyelid depending on where in the lower eyelid of the eye strikes the ramped ridge zone, wherein the lower eyelid of the eye is engaged with at least some portion of the ramped ridge zone at all times (Claim 1, lines 62-67).

Regarding claims 2-3, 7, 16-18, 35, and 37, Ye et al '107 discloses the limitations therein (Claims 1 and 5).

Regarding claims 15, 24, 43, Ye et al '107 discloses the limitations therein (Claim 2).

Regarding claim 6, Ye et al '107 discloses the limitations therein (Claim 4).

Regarding claim 36, Ye et al '107 discloses the limitations therein (Claim 1).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 10-15, 35-36, and 46-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobstein et al.

Regarding claim 1, Jacobstein et al discloses a translating contact lens (Column, lines 28-65, wherein the translating contact lens “10” is shown in Figure 6) having a central axis (Column 3, line 60-Column 5, line 27, wherein the central axis is “22”, Figures 1-5), an anterior surface (Column 3, line 60-Column 4, line 32, wherein the anterior surface is “40”, Figures 2-3) and an

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opposite posterior surface having a first optical zone (Column 3, line 60-Column 4, line 14, wherein the posterior surface “14” has an optical curve “16”, Figure 2), the anterior surface comprising: a second optical zone having a top edge and lower edge (Column 4, line 15-Column 5, line 27, wherein the optical zone includes distance zone “48” and near zone “38” wherein the top edge is the top of the distance zone and the lower edge is the bottom of the near zone, Figures 3-6) and a ramped ridge zone capable of controlling contact lens position on an eye in primary gaze or translating amount, or both, across the eye when the eye changes from gazing at an object at a distance to gazing at an object at an intermediate distance or at a nearby object (Column 5, line 66-Column 6, line 37, wherein the contact lens position changes by controlling the ramped surface “60” with respect to the lower eyelid “64” based on the movement of the eye between distance and near viewing, Figures 8 and 9), wherein the ramped ridge zone is disposed below the optical zone and includes an upper edge, a lower ramped edge (Column 5, line 28-Column 6, line 37, wherein the ramped surface “60” includes an upper edge and a ramped portion, Shown in Figures 7a-h and 8-9), a latitudinal ridge that extends outwardly from the anterior surface (Shown in Figures 7a-h and 8-9, wherein the latitudinal ridge is the ridge “62” that juts out from the lens surface “40”), and a ramp that extends downwardly from the lower ramped edge to a surrounding surface and has a curvature or slope that provides a varying degree of interaction between the ramped ridge zone and the lower eyelid depending on where the lower eyelid strikes the ramped ridge zone (Column 5, line 66-Column 6, line 37, wherein the interaction between the lower eyelid “64” and the ramped surface “60” changes based on the movement of the eye between distance and near viewing, Figures 8 and 9), wherein the lower eyelid of the eye is engaged with at least one portion of the ramped ridge zone at all times



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(Figures 8-9).

Regarding claim 2, Jacobstein et al further discloses that at least one of the first and second optical zones includes: a distance vision zone for distance vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes distance zone “48”, Figures 3-6), the distance vision zone having a first area that is sufficient to overlay a substantial portion of the eye and disposed in a first position within the optical zone so that the pupil is substantially subtended by the distance vision zone when gazing at a substantially horizontal point (Column 5, line 66-Column 6, line 37, wherein the pupil is aligned with the distance vision at the horizontal point, Figures 8-9); and a near vision zone for near vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes near zone “38”, Figures 3-6), the near vision zone extending radially outward from the distance vision zone and having a second area that is sufficient to overlay a substantial portion of the pupil and disposed in a second position within the optical zone so that the pupil is substantially subtended by the near vision zone when gazing at a near vision point below the substantially horizontal point (Column 5, line 66-Column 6, line 37, wherein the pupil is aligned with the near vision below the horizontal point, Figures 8-9).

Regarding claim 10, Jacobstein et al further discloses that the entire ramped ridge zone is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the ramp “60” has a continuous surface without discontinuities).

Regarding claim 11, Jacobstein et al further discloses that the ramped ridge zone is made of several different surface patches (Shown in Figures 1-5 and 7a-h).

Regarding claim 12, Jacobstein et al further discloses that the anterior surface is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the lens has a

continuous surface without discontinuities).

Regarding claim 13, Jacobstein et al further discloses that the latitudinal ridge has a non-uniformly varying elevation profile (Shown in Figures 7a-h).

Regarding claim 14, Jacobstein et al further discloses that the latitudinal ridge has a mirror symmetry with respect to a plan which cut the latitudinal ridge in the middle into two equal parts and contains the central axis (Shown in Figures 6, 7B, 7d and 7f, wherein the ridge has mirrored symmetry).

Regarding claim 15, Jacobstein et al further discloses that the contact lens is a soft contact lens (Column 3, line 31-35 and Column 7, line 5-20).

Regarding claims 35-36, Jacobstein et al further discloses that at least one of the first and second optical zones includes a first portion for distant vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes distance zone "48", Figures 3-6), and a second portion disposed beneath the first portion and the central axis for near vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes near zone "38" which is below the distance portion and the central axis "22", Figures 3-6).

Regarding claim 46, Jacobstein et al discloses a method of producing a translating contact lens (Column 3, line 60-Column 5, line 27, wherein the translating contact lens "10" is made in Figures 1-5), comprising the steps of shaping a contact lens by a manufacturing means to have a central axis (Column 3, line 60-Column 5, line 27, wherein the central axis is "22", Figures 1-5), an anterior surface and an opposite posterior surface (Column 3, line 60-Column 4, line 32, wherein the anterior surface is "40" and the posterior surface is "14", Figures 2-3), wherein the posterior surface has an optical zone (Column 3, line 60-Column 4, line 14, wherein the surface

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“14” has an optical curve “16”, Figure 2), wherein the anterior surface includes an optical zone (Column 4, line 15-Column 5, line 27, wherein the optical zone includes distance zone “48” and near zone “38”, Figures 3-6) and a ramped ridge zone capable of controlling contact lens position on an eye in primary gaze or translating amount, or both, across the eye when the eye changes from gazing at an object at a distance to gazing at an object at an intermediate distance or at a nearby object (Column 5, line 66-Column 6, line 37, wherein the contact lens position changes by controlling the ramped surface “60” with respect to the lower eyelid “64” based on the movement of the eye between distance and near viewing, Figures 8 and 9), wherein the ramped ridge zone is disposed below the optical zone and includes an upper edge, a lower ramped edge (Column 5, line 28-Column 6, line 37, wherein the ramped surface “60” includes an upper edge and a ramped portion, Shown in Figures 7a-h and 8-9), a latitudinal ridge that extends outwardly from the anterior surface (Shown in Figures 7a-h and 8-9, wherein the latitudinal ridge is the ridge “62” that juts out from the lens surface “40”), and a ramp that extends downwardly from the lower ramped edge and has a curvature or slope that provides a varying degree of interaction between the ramped ridge zone and the lower eyelid depending on where the lower eyelid strikes the ramped ridge zone (Column 5, line 66-Column 6, line 37, wherein the interaction between the lower eyelid “64” and the ramped surface “60” changes based on the movement of the eye between distance and near viewing, Figures 8 and 9).

Regarding claim 47, Jacobstein et al further discloses that the anterior surface is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the lens has a continuous surface without discontinuities).

Regarding claim 48, Jacobstein et al further discloses that the latitudinal ridge has a non-

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uniformly varying elevation profile (Shown in Figures 7a-h).

Regarding claim 49, Jacobstein et al further discloses that the latitudinal ridge has a mirror symmetry with respect to a plan which cut the latitudinal ridge in the middle into two equal parts and contains the central axis (Shown in Figures 6, 7B, 7d and 7f, wherein the ridge has mirrored symmetry).

Regarding claim 50, Jacobstein et al further discloses that the manufacturing means is a numerically controlled lathe or molds (Column 3, line 60-Column 5, line 27, wherein the lens "10" is formed by a lathe in cullet "12" and by molding, Figures 1-5).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16, 19-26, and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobstein et al.

Regarding claims 16, 25, and 44-45, Jacobstein et al further discloses that at least one of the first and second optical zones includes: a distance vision zone for distance vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes distance zone "48", Figures 3-6), the distance vision zone having a first area that is sufficient to overlay a substantial portion of the eye and disposed in a first position within the optical zone so that the pupil is substantially subtended by the distance vision zone when gazing at a substantially horizontal point (Column 5, line 66-Column 6, line 37, wherein the pupil is aligned with the distance vision

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at the horizontal point, Figures 8-9); and a near vision zone for near vision correction (Column 4, line 15-Column 5, line 27, wherein the optical zone includes near zone "38", Figures 3-6), the near vision zone extending radially outward from the distance vision zone and having a second area that is sufficient to overlay a substantial portion of the pupil and disposed in a second position within the optical zone so that the pupil is substantially subtended by the near vision zone when gazing at a near vision point below the substantially horizontal point (Column 5, line 66-Column 6, line 37, wherein the pupil is aligned with the near vision below the horizontal point, Figures 8-9), but does not specifically disclose an intermediate vision zone for intermediate vision correction that continuously changes from distant to near vision, the intermediate zone extending radially outward from the distance vision zone and having a second area that is sufficient to overlay a substantial portion of the pupil and disposed in a second position within the optical zone so that the pupil is substantially subtended by the near vision zone when gazing at a near vision point below the substantially horizontal point. Examiner takes judicial notice that it is well known in the art of optically corrective contact lenses, for an optically corrective zone to further include an intermediate vision zone for intermediate vision correction that continuously changes from distant to near vision for the purpose of providing a smooth and continuous connection between distant and near vision and provide a full range of vision correction to the user. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the lens of Jacobstein et al to further include an intermediate vision zone for intermediate vision correction that continuously changes from distant to near vision, the intermediate zone extending radially outward from the distance vision zone and having a second area that is sufficient to overlay a substantial portion of the pupil and

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disposed in a second position within the optical zone so that the pupil is substantially subtended by the near vision zone when gazing at a near vision point below the substantially horizontal point since the examiner takes judicial notice that it is well known in the art of optically corrective contact lenses, for an optically corrective zone to further include an intermediate vision zone for intermediate vision correction for the purpose of providing a smooth and continuous connection between distant and near vision and provide a full range of vision correction to the user.

Regarding claim 19, Jacobstein et al further discloses that the entire ramped ridge zone is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the ramp "60" has a continuous surface without discontinuities).

Regarding claim 20, Jacobstein et al further discloses that the ramped ridge zone is made of several different surface patches (Shown in Figures 1-5 and 7a-h).

Regarding claim 21, Jacobstein et al further discloses that the anterior surface is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the lens has a continuous surface without discontinuities).

Regarding claim 22, Jacobstein et al further discloses that the latitudinal ridge has a non-uniformly varying elevation profile (Shown in Figures 7a-h).

Regarding claim 23, Jacobstein et al further discloses that the latitudinal ridge has a mirror symmetry with respect to a plan which cut the latitudinal ridge in the middle into two equal parts and contains the central axis (Shown in Figures 6, 7B, 7d and 7f, wherein the ridge has mirrored symmetry).

Regarding claim 24, Jacobstein et al further discloses that the contact lens is a soft

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contact lens (Column 3, line 31-35 and Column 7, line 5-20).

Regarding claim 26, Jacobstein et al discloses the lens as shown above, but does not specifically disclose that one of the optical zones includes a cylindrical surface to correct astigmatism. Examiner takes judicial notice that is well known in the art of optically corrective contact lenses, for an optically corrective zone to further include a cylindrical surface to correct astigmatism for the purpose of providing correction of astigmatic errors in addition to distant and near vision. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the contact lens of Jacobstein et al to further include a cylindrical surface to correct astigmatism. Examiner takes judicial notice that is well known in the art of optically corrective contact lenses, for an optically corrective zone to further include a cylindrical surface to correct astigmatism for the purpose of providing correction of astigmatic errors in addition to distant and near vision.

Claims 3-9, 17-18, 27-34, and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobstein et al in view of Rothe et al.

Regarding claims 3, 17, 27, and 37, Jacobstein et al discloses a translating contact lens as disclosed above wherein the anterior surface comprises: a ridge-off zone extending outwardly from the top edge of the second optical zone (Column 5, line 28-Column 6, line 64, wherein the ridge-off zone is the constrictive ring "68" and peripheral curve "24", Figures 5 and 6), and a lenticular zone, extending radially outward from the ridge-off zone and lower ramped edge of the ramped ridge zone, that tapers to a narrow end wherein the posterior and anterior surface meet each other (Column 4, line 54-Column 5, line 65, wherein the lenticular zone is "18", Figures 4 and 6), but does not specifically disclose a transition zone extending from the lower edge of the

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second optical zone to the upper edge of the ramped ridge zone, wherein the transition zone provides a smooth transition from the ridge zone to the second optical zone. Rothe teaches of a contact lens having an optical zone, a ramped ridge zone (Column 4, line 16-Column 5, line 8, wherein the optical zone is “8” and the ramped zone is “12”, Figures 2 and 5), and a transition zone extending from the lower edge of the optical zone to the upper edge of the ramped ridge zone, wherein the transition zone provides a smooth transition from the ridge zone to the optical zone (Column 4, line 16-Column 5, line 8, wherein the transition zone is “6”, which provides a smooth transition between the optical zone “8” and the ridge zone “12”, Figures 2 and 5) for the purpose of adapting the outer surface from a toric optical zone to a spherical outer zone (Column 4, lines 29-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the contact lens of Jacobstein et al to further include a transition zone extending from the lower edge of the second optical zone to the upper edge of the ramped ridge zone, wherein the transition zone provides a smooth transition from the ridge zone to the second optical zone since Rothe teaches of a contact lens having an optical zone, a ramped ridge zone, and a transition zone extending from the lower edge of the optical zone to the upper edge of the ramped ridge zone, wherein the transition zone provides a smooth transition from the ridge zone to the optical zone for the purpose of adapting the outer surface from a toric optical zone to a spherical outer zone.

Regarding claim 4, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further disclose that the curvature center of the distance vision zone is on or very close to the central axis (Shown in Figures 8-9 and 7a-h).

Regarding claim 5, Jacobstein et al and Rothe disclose and teach of a contact lens as



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shown above and it is inherent from Jacobstein et al that the prism effect caused by the deviation of the curvature center of the distance vision zone from the central axis is less than or equal to 1 prism diopter, this being reasonably based upon the similarity in structure between the contact lens of Jacobstein et al and the current invention (Shown in Figures 8-9 and 7a-h).

Regarding claim 6, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses distance vision zone has an oval shape (Shown in Figures 8-9 and 7a-h).

Regarding claims 7 and 18, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the ramped ridge zone comprises a first side edge and a second side edge (Shown in Figure 6), wherein the ridge-off zone extends outwardly from the top edge of the second optical zone, first side edge of the ramped ridge zone and the second side edge of the ramped ridge zone (Column 5, line 28-Column 6, line 64, wherein the ridge-off zone is the constrictive ring "68" and peripheral curve "24", Figures 5 and 6), and wherein the ridge-off zone has sufficient area so that the ridge-off zone, the second optical zone, the ramped ridge zone and the transition zone cover substantially all of the cornea of the eye (Figures 6 and 8-9).

Regarding claims 8-9 and 28, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and it is inherent from Jacobstein et al further disclose that the ramp is made of a curved surface having a radius between 0.1 to 1.0 mm, specifically 0.2 to 0.4 mm, this being reasonably based upon the size of the ramp compared to the distance of 1.5 mm shown in Figures 4 and 6.

Regarding claims 29 and 38, Jacobstein et al and Rothe disclose and teach of a contact

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lens as shown above and Jacobstein et al further discloses that the entire ramped ridge zone is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the ramp “60” has a continuous surface without discontinuities).

Regarding claims 30 and 39, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the ramped ridge zone is made of several different surface patches (Shown in Figures 1-5 and 7a-h).

Regarding claims 31 and 40, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the anterior surface is continuous in first and second derivative (Shown in Figures 7a-h and 8-9, wherein the lens has a continuous surface without discontinuities).

Regarding claims 32 and 41, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the latitudinal ridge has a non-uniformly varying elevation profile (Shown in Figures 7a-h).

Regarding claims 33 and 42, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the latitudinal ridge has a mirror symmetry with respect to a plan which cut the latitudinal ridge in the middle into two equal parts and contains the central axis (Shown in Figures 6, 7B, 7d and 7f, wherein the ridge has mirrored symmetry).

Regarding claims 34 and 43, Jacobstein et al and Rothe disclose and teach of a contact lens as shown above and Jacobstein et al further discloses that the contact lens is a soft contact lens (Column 3, line 31-35 and Column 7, line 5-20).

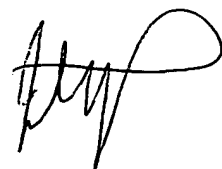
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T Stultz whose telephone number is (571) 272-2339. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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September 9, 2004



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